CAI

Questionnaire



for Home Insulation





Energy, Mines and Resources Canada Énergie, Mines et Ressources Canada



What is **Energy**?

Ener\$ave is a free information service designed to show you how to cut your fuel bill by as much as 50% by improving the level of insulation in your home. Using the data you supply in filling out our questionnaire, we analyze your home insulation requirements by computer and send you the results by mail.

The computer analysis shows you the best way to invest your money in home insulation. It pinpoints areas in your home where insulation can be economically increased and informs you if other fuel-saving measures such as weatherstripping, storm windows, thermostat setback, and furnace servicing are advisable. For each recommendation, we estimate how much you'll save on your annual fuel bill and how much you'll have to pay for materials and installation services. And we also estimate the payback period, that is, the number of years required for your investment to be returned in fuel savings.

The results of the analysis will be sent to you on the Ener\$ave home insulation chart (sample shown below) which includes insulation tips specific to your home and advice on how to get financial assistance.

Ener\$ave is applicable to all detached, semi-detached and row-houses up to a maximum of three storeys. Regional variations in climatic conditions, housing characteristics, and fuel, material and contractor prices are accounted for in our calculations.

Ener\$ave is a purely advisory service and is not a requirement for any financial assistance program on home insulation.

SAMPLE CHART:



We would like to acknowledge the assistance of Scanada Ltd., Applied Urbanetics Ltd. and Norman Hall of the Prince Edward Island Department of Industry and Commerce for their work on the development of the Ener\$ave program.



Before you fill out the Questionnaire read these instructions

Careful attention to the instructions will save you time in filling out the questionnaire and will ensure that the data we receive for analysis is accurate and complete.

- 1 Read each question and the explanation notes carefully.
- 2 All questions should be answered by marking an X in the appropriate square. Mark only one square per question (except Question 32).
- Once you have answered all 32 questions, detach the answer sheet from the back of the questionnaire. Carefully fill in your name, address, telephone number and postal code. Transfer your answers from the questionnaire to the sheet, again marking an X in the appropriate square. Please use pencil.
- 4 Recheck the answer sheet against the questionnaire to make sure you have not made any mistakes.
- The answer sheet will fold to form a self-addressed envelope. Please mail it to us as soon as possible.
- The questionnaire contains your copy of the information you have given. Keep it in a safe place so that you will be able to refer to it when you receive your free analysis.

TOLL-FREE HEATLINE: 1 • 800 • 267 • 9563*

To assist you with any questions you may have regarding the questionnaire or the computer analysis and to provide direct advice on any aspect of your home insulation requirements, Ener\$ave operates the Heatline, a toll-free telephone information service. Our bilingual personnel will be happy to hear from you.

Call **toll-free** 1-800-267-9563 weekdays during regular business hours.

*B.C. residents call toll-free 112-800-267-9563. Yukon and Northwest Territories call collect (613) 995-1801. Ottawa-Hull residents call 995-1801.





General

When was your home built?

- **1** before 1945
- 2 1945-1960
- 3 after 1960

2 How many storeys does your home have?

If your home has an addition or extension, indicate the number of storeys in the main structure. A basement or crawl space should not be considered as a storey.

For the purposes of this question, the type of home you occupy (detached, semidetached, or row-housing) and its roof style (flat or peaked) are not important.

- 1 one storey
- 2 one & half storey
- 3 two storey
- 4 two & half storey
- 5 three storey
- 6 split level
- 7 split entry



One Storey



One and One-half



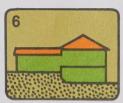
Two Storev



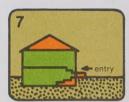
Two and One-half



Three Storey



Split Level



Split Entry

What is the basic shape of the ground floor of your home?

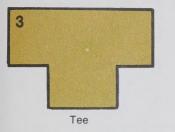
Disregard any unheated porches, garages, sheds, etc. and any small irregularities in shape.

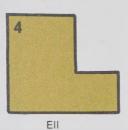




Square

Rectangle

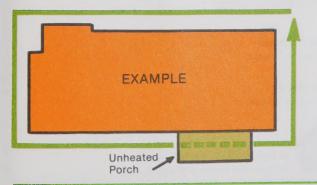




- 1 square
- 2 rectangle
- 3 tee
- 4 ell
- 5 other

What is the total distance (i.e. perimeter) around the ground floor of your home?

This distance should be measured on the outside of your home, as in this example. Disregard unheated porches and garages.



- 1 less than 25 m (less than 82 ft.)
- 2 25 to 30 m (82 to 101 ft.)
- 3 31 to 36 m (102 to 121 ft.)
- 4 37 to 42 m (122 to 141 ft.)
- 5 43 to 48 m (142 to 161 ft.)
- 6 49 to 54 m (162 to 181 ft.)
- 7 55 to 60 m (182 to 201 ft.)
- 8 61 to 66 m (202 to 220 ft.)
- 9 more than 66 m (more than 220 ft.)



If your home has more than one storey, what is the total distance (i.e. perimeter) around the floor of the
uppermost storey?

This distance should be measured on the inside of your home. For the purposes of this question, the upper part of a split level would be the uppermost storey.

one storey only
2 less than 25 m (less than 82 ft.)
3 25 to 30 m (82 to 101 ft.)
4 31 to 36 m (102 to 121 ft.)
5 37 to 42 m (122 to 141 ft.)
6 (142 to 161 ft.)
7 \(\begin{array}{c} 49 \to 54 \text{ m} \\ (162 \to 181 \text{ ft.}) \end{array}
8 55 to 60 m (182 to 201 ft.)
9 (202 to 220 ft.)
more than 66 m (more than 220 ft.)

Roof

6 How much of your total roof space is an attic?

An attic here refers to any part of your roof space that is large enough for a person to get into so that it would be possible to insulate.

Roof space refers to the space between the ceiling and roof of your home. Do not include roof space over unheated areas.

1	none of the roof space
2	some (about 1/4)
3	half
4	most (about 3/4)

all



A person could get into **none** of the roof space in this house.



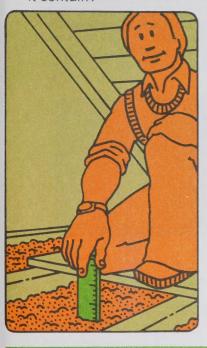
A person could get into all of the roof space in this house.





A person could get into **most** of the roof space in these houses.

If you identified an attic space in Question 6, how much insulation does it contain?



1	no attic space identified
2	no insulation
3	about 5 cm (2 in.)
4	about 10 cm (4 in.)
5	about 15 cm (6 in.)
6	20 cm or more (8 in. or more)

3	If not all of your roof space is an attic, does the remaining roof space contain any insulation?
	any insulation?

- 1 no remaining roof space
- **2** yes
- 3 no
- 4 don't know

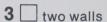


Walls

If your home is attached to another dwelling (eg., semi-detached or rowhousing), how many walls do you share with your neighbour(s)?

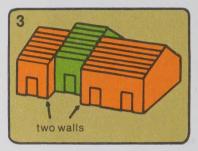
1		not	atta	chec
-	_			0,,00

2 one wall









10 What is the total length of shared wall?

If you share more than one wall, add the length of the shared part of each wall.

- 1 not attached
- 2 less than 3 m (less than 10 ft.)
- 3 \(\begin{array}{c} 3 \to 6 \text{ m} \\ (10 \to 22 \text{ ft.}) \end{array}
- 4 7 to 10 m (23 to 35 ft.)
- 6 \(\sum_{\text{(49 to 61 ft.)}}\)
- 7 \(\begin{array}{c} 19 \to 22 \text{ m} \\ (62 \to 74 \text{ ft.}) \end{array}
- 8 23 to 26 m (75 to 87 ft.)
- 9 more than 26 m (more than 87 ft.)

How are your exterior walls constructed?

Most Canadian houses are wood frame. Before indicating that your wall construction is solid masonry or stone, make certain that the walls are not actually built with a wood frame. Also note that plank frame houses are rare outside Quebec.

If you are not certain about the construction of your walls, you may be able to find out by removing the cover on a light switch or an outlet box. In some houses, you can also see into the wall space from the attic.

wood frame (with any cover including brick, stucco, or various sidings)

2 solid masonry or stone (with no wood frame)

3 plank frame or solid log



The exterior walls of this house are built with wood frame construction.

2 How much of the perimeter of your exterior wall contains at least some insulation?
insulation?

Tar paper, felts, foils, boards or fiber board sheetings should not be considered as insulation.

To determine whether or not the walls are insulated, you may be able to inspect the walls from the attic, or by drilling a small hole into the back of a cupboard (the hole should be plugged after inspection). Wall insulation can also be checked by removing the covers on light switches or outlet boxes.

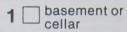
- 1 none of the perimeter
- **2** some (about 1/4)
- 3 Lhalf
- **4** most (about 3/4)
- 5 all

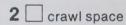




Basement

3 What type of foundation do you have?













basement

crawl space

slab-on-grade

How much of your outside foundation wall is exposed above ground?

> If the exposed height varies around the perimeter of the wall, specify the average distance.

1		
		Exposed foundation wall

1	none of the foundation wa	
1	foundation wa	all

2	15	cr	n c	or l	les	S
_	(6	in.	or	le	SS)

3	about	30	cm	(1	ft.)

1		How much of the perimeter of your foundation wall is insulated either on the inside or the outside?
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In this house, half of the perimeter of the foundation wall is insulated.



1	none	of	the
•	 perim	et	er

- **2** some (about 1/4)
- 3 half
- **4** most (about 3/4)
- **5** al

How much of the floor of the heated area of your home is exposed to the outdoors or is over an unheated area?

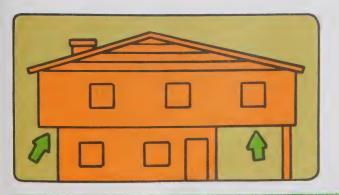
The heated area should include any rooms that are not fully heated (i.e., kept much cooler than the rest of your home during the winter).

Do not include floor area over crawl spaces, cellars, basements or slabs-on-grade.

The exposed floor area could include an overhanging portion of a second storey, rooms over a carport, rooms over an unheated garage or porch, or a house or portion of it on stilts or blocks.

1	none	of	the	floor
	 none	OI	me	11001

- 2 some (about 1/4)
- half
- **4** most (about 3/4)
- 5 all





Basement/Windows and Doors

7	If you identified an exposed floor area in Question 16, what portion of
	it contains at least some insulation?

floor area
none of the exposed floor
some (about 1/4
half
most (about 3/4)

Windows and Doors

How many storm windows would you need to cover all windows which now have only one layer of glass in the wintertime?

Consider only those windows which separate the heated area of your home from the outdoors. For the purpose of this question, do not include small basement windows.

1	none
2	5 or lo

	_	-	
2	_	A	10

Windows and Doors



Do any of your windows rattle or have drafts around them on windy days?

1 yes



How many doorways separate the heated area of your home from the outdoors or from unheated areas?

Patio doorways should be included. Double doors should be considered as one doorway.

- 1 1
 - 2 🗆 2
 - **3** 🔲 3
- 4 4
- 5 or more

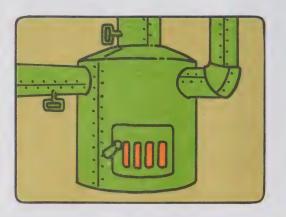
How many of these doorways are weatherstripped, have tight-fitting doors, or have storm doors so that there is no draft?

- none of the doorways
- **2** some (about 1/4)
- 3 half
- **4** most (about 3/4)
- 5 all



22 What type of fuel is used to heat your home?

If you use more than one type, indicate the type which provides most of your fuel.



1	oil
2	electric
3	natural gas
4	propane
5	wood
6	coal
7	solar

23	During the last 12 months, what was the total cost of the fuel identified in
	Question 22?

If your home is electrically heated, include your total electric bill.

1 \$200 or less
2 \$201 to \$300
3 \$301 to \$400
4 \$401 to \$500
5 \$501 to \$600
6 \$601 to \$700
7 \$701 to \$800
8 = \$801 to \$1000

\$1000 to \$1200

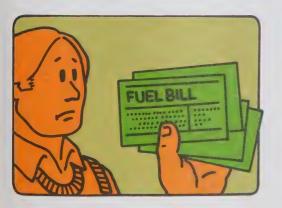
over \$1200

What other type of fuel is used to supply at least 25 percent of your heating needs?

Do not include fuel for a conventional fireplace.

- 1 none
- 2 | oi
- **3** electric
 - natural gas
- 5 propane
 - 6 wood
 - 7 coal
- B solar

25 During the last 12 months, what was the total cost of the secondary fuel identified in question 24?



- none identified
- 2 \(\) \$100 or less
- 3 \(\) \$101 to \$200
- 4 \(\) \$201 to \$300
- **5** \$301 to \$400
- 6 s401 to \$500
- **7** over \$500
- 8 no cost



26 How do you heat your water?

1	oil hot water heater
2	electric hot water heater
3	natural gas heater
4	propane heater
5	range boiler
6	furnace
7	solar
8	no hot water

In the winter, what is the average temperature in your home during the day?



1 12-14	55-59
2 🗌 15-18	60-65
3	66-68
4 21-22	69-72

over 72

5 over 22



over 72

28 In the winter, what is the average temperature in your home during the night?



1 □ °C 12-14	°F 55-59
2 15-18	60-65
3 19-20	66-68
4 21-22	69-72

5 over 22

IL	n the winter, how many rooms of the heated area of your home are ot fully heated?
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Rooms should be considered not fully heated if they are left much cooler than the temperature marked in question 27.

1		none
---	--	------

2	one

_		-
2	1	
0		TWC

When was your heating system last cleaned and serviced?

1	within the past
•	12 months

2	more	tha	an	12	
_		mont	hs	ad	0



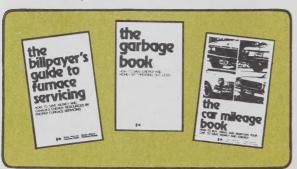
Publications

31 Do you have a copy of KEEPING THE HEAT IN, our free book on home insulation?

If you don't, we'll send you one. Its Canada's most popular guide to home insulation. Make sure you read it before insulating your home. 1 yes



32 Which of the following free publications from our energy conservation library would you like to receive? (Check as many as you wish.)



- The Billpayer's
 Guide to Furnace
 Servicing
- The Garbage Book
- 3 The Car Mileage

1 Do you have a copy of KEEPING THE HEAT IN, our free book on

Answer Sheet

Answer Sheet

1 donedtions	
1 □yes 2 □no	en
how	Answe Detach this ansuse it to record to the questions must answered by man X in the appr square Please use pene
->	Question No.

swer Sheet ch this answer sheet and to record your answers

questionnaire. All ions must be ered by marking The answer sheet will fold to n the appropriate form a self-addressed envelope. Please mail as e use pencil. soon as possible. Answer

Address City/Town: Province: Telephone: Please fill in your postal code. It is necessary for a rapid

Question No.	Answer	

Please complete this information first. (Please print.)

(Surname)

31. Keeping the Heat In

eturn of your free analysis. n what language do you wish	Postal Code: to correspond? 1 English 2 Frence
Question No.	Answer
7. Insulated Exposed Floor	
8. Windows	1 2 3 4 5 6 7 8 6 7
9. Window Drafts	· 🗀 :
O. Doorways	1 2 3 4 6
1. Weatherstrip or Storms	, , , , , , , , , , , , , , , , , , , ,
2. Fuel Type	
3. Fuel Cost	
4. Secondary Fuel	
5. Secondary Fuel Cost	· [] ; [] 4 [] 5 [] 6 [] 7 [] 6 []
6. Hot Water Heater	
7. Day Temperature	, , , , , , , , ,
8. Night Temperature	, , , , , , , , , , , , , , , , , , , ,
9. Unheated Rooms	· 🗆 : 🗆 · 🗆 · 🗆
Furnace Servicing	

32 Which of the following free publications from our energy conservation library would you like

servicing

The Billpayer's Guide to Furnace







12.	Wali Insulation
13.	Foundation Typ
14.	Exposed Found
15.	Foundation Insu
16	Exposed Floor 4

8. Roof Insulation

10. Length of Shared Walls 11. Wall Construction

9. Shared Walls

1. When Built 2. Storevs 3. Shape 4. Ground Perimeter 5. Upper Perimeter 6. Attic Space 7. Attic Insulation

> Before mailing, please recheck answers against questions to make sure that the information on this sheet is correct.

Affix flap here to form envelope.